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A Project Report on

Morphometric Analysis of a Drainage Basin Using Geographical Information System

Submitted by

DRASHTI JAYANTILAL BHADJA

(Roll no: 22GI02, Enrollment No: 22201400301002)

Internal Guide

DR. KRUNAL B. SUTHAR
HOD, Geoinformatics
Department -ISTAR
The CVM Universtiy
V. V. Nagar-388120,
Gujarat, India

External Guide

Mr. Niraj Chhasatiya
GIS Head- Theodesh
Consultants
Vadodara-300018
Gujarat, India

Academic year
2022-2024

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Morphometric Analysis of Drainage Basin Using Geographic Information System

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Guided by:
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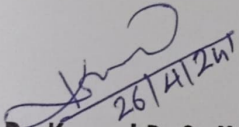**ISTAR - Constituent College of CVM University**
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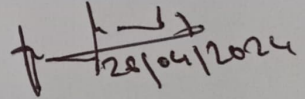
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CERTIFICATE

This is to certify that the project work embodied in this report entitled "Morphometric Analaysis of a Drainage Basin Using Geographical Information System" was carried out by Drashti Jayantilal Bhadja (22201400301002) at the Geoinformatics department, Institute of Science and Technology for Advanced Studies and Research (ISTAR)- CVM University, Vallabh Vidyanagar fulfilment of the requirement for the award of M.Sc. (Geoinformatics) for the Project Work (101400401). This project work has been carried out under my guidance and it is to my satisfaction.

26/4/24

Dr. Krunal B. Suthar
Project Guide,
Head, P.G. Department of Geoinformatics
ISTAR-CVM University

28/04/2024

Dr. M. M. Raj
Principal,
ISTAR-CVM University

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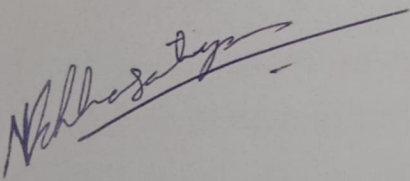VALLABH
VIDYANAGAR
388120

Ref: TDC/HR/CER/2024/258   Date: 15th April 2024

Certificate for Internship

This is to certify that **Ms. Drashti Jayantilal Bhadja** a Student of 2nd Year (4th Sem.) M.Sc Geoinformatics with Enrol. No 22201400301002 from Institute of Science & Technology for Advances Studies & Research (ISTAR), Vallabh Vidyanagar (Gujarat) has undertaken Internship at Theodesh Consultants - Vadodara from **6th October 2023 to 15th April 2024.**

During this period she has carried out her Project work with us, her area of Project work was **Morphometric Analysis of a Drainage Basin Using Geographical Information System.** She has worked in data collection, data processing and data analytics. She has been methodical in defining process and finding solution. The finding of the Project has been of good use and expected results were achieved during the Project work.

For, Theodesh Consultants

Nilraj Chhasatiya
(GIS Head)

ACKNOWLEDGEMENT

We extend our sincere gratitude to our internal guide, Dr. Krunal Suthar, Head of the Department of Geoinformatics, for his unwavering support, guidance, and expertise throughout the duration of this research project. His insightful inputs and encouragement have been invaluable in shaping our understanding and implementation of Morphometric Analysis using Geographical Information System (GIS).

We would like to express our heartfelt appreciation to Dr. M.M. Raj, Principal of Istar College, for his continuous encouragement and support, which have been instrumental in facilitating the progress and completion of this study.

Special thanks are due to Miss Akansha Verma from CVM University for her valuable contributions and assistance, which have significantly enriched the research process and outcomes.

We are deeply grateful to our external guides, Archi Patel, Dhwani Soni, and Nilraj Chhasatiya, GIS Head, for their expertise, guidance, and unwavering support throughout this endeavor. Their collaborative efforts have played a crucial role in navigating the complexities of morphometric analysis and GIS techniques.

Furthermore, we acknowledge the collective efforts of all individuals and institutions who have contributed directly or indirectly to the success of this research project.

This study stands as a testament to the collaborative spirit and dedication of everyone involved, and we express our heartfelt gratitude for their invaluable contributions

Thanking you

Drashti Bhadja (22201400301002)